CAPSTONE: VALUATION 28C00500 Spring 2023, period IV

3.2.2023

Course objective: By the end of the course, students will be able to:

- Understand and apply key valuation concepts to value companies
- Analyze and incorporate financial statement information into a spreadsheet valuation model
- Understand the pros and cons of various valuation models
- Interpret, discuss, and present valuation results for strategic decision making

Pedagogical philosophy: The course aims to integrate everything you have learnt so far. After gaining the theoretical basis for different valuation models, our focus will be on applications.

Prerequisites: This course builds on (almost) everything you have learnt during B.Sc.-degree with finance concentration. It is not self-contained.

- To be able to make any sense of the course, you have to be familiar with Introduction to Finance, Corporate Finance, Investment Management, Introduction to Accounting, and intermediate spreadsheet (e.g., Excel) skills. Aalto University or exchange students with less than three courses completed in finance are strongly discouraged from enrolling, although can do so at their own risk.
- To be able to fluently follow the course and maximize learning, at least five completed courses in finance and accounting as well as advanced spreadsheet skills are strongly recommended. Students may find it helpful to make this the last or almost last course of their B.Sc. degree.

Course content: The course consists of five parts:

- 1. Introduction and corporate strategy
- 2. Interpreting and using financial statements for valuation
- 3. Forecasting
- 4. Valuation techniques
- 5. Empirical issues and special cases

Registration to course: Maximum of 75 students can be accepted to the course. In case of overbooking, priority will be given to Aalto finance students based on criteria in SISU.

Late registration: In case you did not register in time, it may be possible to register to the course if space permits AND you are a finance major. Please contact planning officer Petra Kuisma.

Relation to other courses and value-add of this course: This course has links to several other courses.

- 1. All courses in "Fundamental knowledge in business" (including first course in Accounting, Business Law, Economics, Finance, Management, and Marketing) will build a basis for understanding how value is created, measured and managed. Students are assumed to be comfortable with basic business concepts and terminology. Investment Management (28C00300) is required for the understanding of basic return concepts. Corporate Finance (28C00100) discusses capital structure and dividend issues integral in corporate valuation
- 2. Investment Management (28C00300) also covers valuation issues briefly, but we will dig much deeper in investigating what is an entire company or its equity worth, especially the "how to" part of valuation

Value-add of this course is to teach you how to build the right valuation model to the valuation task at hand and how to interpret the results.

Required mindset and amount of work: This course requires a different mindset than many of the courses you have taken so far. It gives you little closed-form tasks, such as asking to compute a number using a formula you have just learnt. Rather, it requires independently to structure and solve a problem, which usually does not have just one answer, but those answers with better logic based on data are likely better. Open-ended problems are a characteristic of professional jobs, whereas close-ended problems are best left to associate professionals or automated.

This course requires a lot of work. You will most likely be frustrated and feel overwhelmed. There are no easy answers, but development of a perspective based on facts.

Instructor: Associate Professor Elias Rantapuska, Tel: +358 40 353 8419, elias.rantapuska@aalto.fi. Office hour are on Mondays 2-3 PM online at https://aalto.zoom.us/j/9224976309, please send an email beforehand to ensure instructor will also log in. For all content and course policy matters, please contact the instructor.

Co-instructor: Erkki Vihriälä, erkki.vihriala@aalto.fi. For course administration, studentled case sessions, and logistics please first contact Erkki.

Preferred mode of communication: E-mail is especially good for questions, which are likely to require a short answer. For topics worth a more detailed content-related discussion in class or office hour is usually more efficient.

Schedule:

The course is on campus.

1) The course has live lectures. These lectures are not recorded or streamed. On March 20, the lectures are exceptionally on Monday, from 8 AM to noon. There are no lectures on March 21.

- 2) The course has pre-recorded *lecture videos* in addition to live lectures. The set of lecture-videos has been developed during spring 2021 course. These videos are broadly equivalent to on campus live lectures. In case of discrepancy, discussion in live lectures is considered "the truth". Note that the MyCourses site also has *valuation videos* (also available as podcasts), which are different from lecture videos (for further information, see 'Video quiz').
- 3) Student-led case sessions are (March 9, March 16, and March 30) from 1:15 2:45 PM.
- 4) Visiting lecture by Danske Bank Corporate Finance is live on March 16, 3-4:30 PM

Please note that the schedule for the course is very tight and the course requires a lot of work. It will be an imperative to have a "clean schedule" especially before group valuation project deadline.

Course material:

- Lecture notes and assignments provided by the instructors and visiting lecturers
- Palepu Krishna G., Paul M. Healy and Erik Peek: Business Analysis and Valuation IFRS edition, 6th or 5th ed. (Textbook, required reading)
- Lecture-videos at MyCourses-page
- Valuation videos at MyCourses-page
- Additional material posted on course MyCourses-page

Case assignments: There will be three case assignments to be submitted on the day of the respective student-led case sessions. Each assignment involves assignments on the group valuation project company. Due dates are provided on the course schedule. You may prepare the packages in groups of up to 4 students, no exceptions to the maximum group size. High-level discussion between groups is allowed, but no coordination of work between groups (e.g., answer sharing) is allowed.

Case reports (presentable version in .pdf) must be submitted on MyCourses by 11:45 (sharp!) on the due date. Case assignments constitute 30% of the final grade, 10% for each case.

Use my courses to register your group choice. You are free to switch groups between assignments.

Student-led case sessions with case presentations: We will discuss case assignments in the three student-led case sessions. Each group should sign up for a presentation in one student-led case session and be prepared to discuss any question of a case during the session. Instructor will randomly call up signed up groups to discuss one question in a case for up to 5 minutes and we continue discussion based on the group presentation. The ordering of the groups will be random so any group can be called to discuss any case question. Only group members present in the session will be awarded points. Case presentation constitutes 5% of total grade.

If you are not signed up for a presentation on a particular day, you do not have to be present in class to receive points from the case assignment. Sign-up for case presentations is available at MyCourses page (one signup per group).

Video quiz: for most of the lectures, there is additional one or more short valuation videos. These videos were produced in spring 2018 by asking several practitioners how they perform valuation in real life. Your task is to watch these videos before the exam and answer 1-2 multiple choice questions to complete the video quiz. Video quiz (all questions related to all videos combined) constitutes 5% of the total grade.

Group valuation project: This project enables the students to experience a real-world challenge: valuation of real-life case company which is still in the minority shareholder arbitration process for the fair value of the share. The group valuation project is Caverion public to private buyout.

The group valuation project model should be submitted as a spreadsheet file containing at least the following: inputs, forecasted financial statements, actual valuation, and summary valuation. The components of the model can be presented on multiple worksheets or on a single worksheet but, in either case, related items must be grouped close together and the logical flow must be clear – i.e., a left-to-right top-to-bottom flow is required. The model must be self-contained: please do not include links to other files or internet resources in the final submitted version, although you are of course welcome to have these features in any interim working version of the model.

Group valuation project constitutes 30% of the final grade. You should submit both the model (one spreadsheet file) and high-level documentation slides, two files in total. Suggested length of high-level documentation is 5-10 slides: it does not have to cover the entire model, but key strategic insights and assumptions and of course your final estimate for intrinsic value of one share.

Group valuation project is due on April 12 at 11:45 AM.

Class participation: Outstanding class activity constitutes additional 5% for the final grade. Class attendance in lectures and student-led case sessions is not mandatory. Remember that human cognition is typically limited to one task only: you cannot learn valuation and comment on Facebook/Twitter/Jodel/Tinder etc. simultaneously. Log in your activity through MyCourses to have a chance to receive some of the above-described up to 5%.

Scholastic dishonesty: We expect adherence to highest standards of scholastic honesty and full understanding of "Aalto University Code of Academic Integrity and Handling Violations Thereof". You are free to discuss problems on a general level and help each other conceptually, but each group should submit their own, independently prepared answer. Any violations are taken very seriously: there have been cases of academic dishonesty in fall 2020 which have led to dismissal from the class and loss of trust and reputation. Do not tarnish your reputation – it is far more valuable than your GPA! If you

do not believe the instructor, ask Enron CEO Jeffrey Skilling or Jari Aarnio how do they feel about pushing boundaries for integrity really hard.

ChatGPT (and other AI) clause: using ChatGPT is not forbidden, it is even encouraged. Copy-pasting answers from AI and presenting them as your own is however, considered as scholastic dishonesty. Feel free to use AI to check you have not missed anything AI would not miss, if there is an alternative way of explaining a topic for learning etc. An answer you submit should eventually reflect *your own intellectual output*, using AI as an input is always fine. ChatGPT seems to perform well in standard questions (e.g., "what items you need to compute WACC"), but not that well in questions requiring high-degree of contextuality (e.g., "is the revised tender offer price for company X fair?"). You should be particularly careful with references, ChatGPT seems to get them wrong.

Exam: There will be a final closed book exam that will cover the lectures, student-led case sessions, and assigned chapters from the course material. Exam constitutes 30% of the final grade. The first exam will be held on April 18 at 1-4 PM, <u>U2-U157</u>. There will be a makeup exam on June 7 (but there will not be a third exam). All case, group valuation project, presentation and participation points are valid in these two exams only. Sign up normally for the second exam through SISU, for the first exam you are automatically enrolled. In case you miss registration to the second exam, please follow current regulations and deal with the exam office if necessary – unfortunately the instructor and co-instructor have no power on who can participate the exam so contacting them will not help.

Passing the course: To pass the course, a student is required to score at least 50 points on all grading items combined. It is not possible to do any extra work after the final grades have been assigned, this applies also to grades just below the higher mark cutoff. The instructor retains the right to determine rules and allocations of additional points on top of 100% at his own discretion, even while the course is in progress. Grading elements up to regular 100% are of course fixed. 50% of full points translates to a grade of 1, 60% to a grade of 2, 70% to a grade of 3, 80% to a grade of 4, and 90% to a grade of 5.

Summary of grading:

Item

Case assignments	30%
Case presentation	5%
Video quiz	5%
Group valuation project	30%
Final exam	30%
Total	100%

Class participation Additional 5%

Retrieving course materials:

Lecture notes: Course MyCourses-page
Assignments: Course MyCourses-page
Videos: Course MyCourses-page

• Textbook: Bookstore or library

You can order a printed copy at:

https://akateeminenwebshop.com/tuote/erik peek/business analysis and valua tion_ifrs/9781473779075

An e-book can be downloaded (for a charge) at: https://www.cengage.uk/c/co/9781473779075/

MyCourses page

- Primary source of information
- To be updated regularly

https://mycourses.aalto.fi/course/view.php?id=36901

Tentative schedule: Please review the assigned material before the class.

All sessions are held at <u>U3-U141</u>.

Feb 28 Introduction to course

Valuation basics

Readings: Palepu et al., Chapter 1

Corporate strategy and operations as a source of value

Readings: Palepu et al., Chapter 2

Mar 2 Interpreting and using financial statements for

valuation I

Readings: Palepu et al., Chapter 3 and 4

Interpreting and using financial statements for

valuation II

Readings: Palepu et al, Chapter 5

Mar 7 Forecasting I: income statement and balance sheet

Readings: Palepu et al., Chapter 6

Forecasting II: cash flow statement

Palepu et al., Chapter 6

Mar 9 Student-led case session I: Strategy analysis

Case study: Group valuation project company, Part 1: Strategy analysis

Mar 14 Valuation techniques I: DDM and DCF Readings: Palepu et al. Chapter 7 Valuation techniques II: RI and accruals-based Palepu et al. Chapter 7 Readings: Mar 16 Student-led case session II: Interpreting and using financial statements for valuation Group valuation project company, Part 2: financial Case study: statements **Mar 16** Visiting lecture by Danske Bank Corporate Finance Material provided by Danske Bank Corporate Finance Readings: **Mar 20 Valuation techniques III: Multiples and connection** (Monday 8-12 AM!) between techniques Readings: Palepu et al., Chapter 7 Empirical issues in valuation: terminal value, cost of capital, equity premium, growth rates Palepu et al, Chapter 8 Readings: **Case introduction** Buyout of Caverion, public material Readings: Mar 28 **Special cases in valuation** Readings: Palepu et al., Chapter 10 (related to distress prediction, credit analysis can be skipped) Mar 30 Student-led case session III: Forecasting and valuation Readings: Group valuation project company, Part 3: forecasting and valuation April 3-9 No class, time to work on your final valuation project and prepare for the exam Apr 12 Group valuation project deadline, 11:45 AM Exam. 1 – 4 PM **Apr 18** (<u>U2-U157</u>) You will be automatically enrolled through course sign up

June 7

Make-up exam Sign up normally via SISU